

SUMMARY

The Spent Nuclear Fuels (SNF) mission consists of the Spent Nuclear Fuel Project WBS 1.3.1.1 (Project Baseline Summary [PBS] WM01) and the follow on, autonomous Canister Storage Building (CSB) Operations Project WBS 1.3.2.1 (PBS WM02). The existing SNF Project contractor organization is the caretaker of PBS WM02, though the work scope is not part of the SNF Project. There is no funding for PBS WM02 in FY 1998.

Construction of the CSB is 83 percent complete compared to 86 percent planned. Schedule delays have resulted from the new Multi-Canister Overpack (MCO) sealing strategy.

Construction of the Cold Vacuum Drying (CVD) Facility is 48 percent complete compared to 57 percent planned. The difference (about four weeks) is due to delays of CVD wall panel erection due to a safety analysis hold. The safety analysis hold has since been lifted.

The MCO basket fabrication was placed on hold for a second time due to deficiencies in the fabricators quality assurance practices. Redesign of the MCOs was initiated to improve the strength to accommodate potentially higher internal pressures.

The remaining three MCO transport casks are on track to be delivered in April 1988, several months ahead of schedule. The first CVD vacuum processing skid is ready for delivery to the site.

The State of Washington Department of Health (WDOH) approved the K West Basin Air Sparge System Notice of Construction (NOC) permit. The NOC for the 200 Area Interim Storage Area (ISA) was submitted to RL on schedule.

Fiscal year to date milestone performance (EA, DOE-HQ, Field Office, and RL) shows that one milestone was completed on or ahead of schedule; there are two overdue milestones; and seven milestones forecast late.

ACCOMPLISHMENTS

- CSB construction is 83 percent complete.
- CVD facility is 48 percent complete.
- WDOH approved K West Basin Air Sparge System NOC Permit.
- Initiated MCO redesign to improve strength.
- First CVD vacuum processing skid readied for delivery to site.

COST PERFORMANCE (\$M):

	BCWP	ACWP	VARIANCE
Spent Nuclear Fuels	\$60.8	\$64.5	(\$3.7)

The \$3.7 million (6 percent) unfavorable cost variance is due to a combination of the sealed MCO strategy advanced work authorization, CVD design development, basin crane overruns, and basins operation and maintenance overruns.

SCHEDULE PERFORMANCE (\$M):

	BCWP	BCWS	VARIANCE
Spent Nuclear Fuels	\$60.8	\$74.9	(\$14.2)

The \$14.2 million (19 percent) unfavorable schedule variance is due to the construction holds at K Basin and the CVD wall panel erection. These holds were released in February. An additional hold on MCO procurement activities is still in effect awaiting the resolution of the MCO Sealing Strategy BCR. All variances are off the critical path and are recoverable.

ISSUES

- 1) **Issue/Impact: Projected FY 1998 cost growth.** Project schedule for K Basin fuel removal is threatened.

Strategy/Status: a) Manage projected costs to achieve reductions; b) pursue funding sources; c) evaluate schedule alternatives. Potential schedule impacts have been identified; reprogramming/funding source alternatives are being reviewed within PHMC scope; Tri-Party Agreement milestones proposed, which reflect uncertainties and impacts.

- 2) **Issue/Impact: Discovery of Aluminum Hydroxide on K Basin Fuel.** Potential re-design of Fuel Retrieval System (FRS) if the additional water content cannot be accommodated.

Strategy/Status: a) Develop analytical model to define impacts; b) perform cleaning tests; and c) by August 1998, determine whether cleaning of fuel elements is required. Defining analytical and test requirements; RL approved advanced work authorization for new scope.

COST VARIANCE ANALYSIS

WBS/PBS	COST VARIANCE: (\$ 3.7M)	
Spent Nuclear Fuel 1.3.1.1/WM01	Description and Cause: The six percent unfavorable variance is due to the MCO strategy advanced work authorization, CVD design development, basin crane overruns, and Basin Operations & Maintenance cost overruns.	Impact: Project schedule for K Basin fuel removal is threatened. Corrective Action: Manage project costs to achieve reductions, pursue funding sources, evaluate schedule alternatives.

SCHEDULE VARIANCE ANALYSIS

WBS/PBS	SCHEDULE VARIANCE: (\$ 14.2M)	
Spent Nuclear Fuel 1.3.1.1/WM01	Description and Cause: The 19 percent unfavorable schedule variance is due to placing K Basins construction starts on hold due to the NOC permit and baseline work scope being stopped due to the MCO Sealing Strategy.	Impact: K Basin sub-projects are behind schedule to the current baseline. However, no project impact is expected. MCO sealing strategy impact is under evaluation. Corrective Action: A baseline change request to address the MCO sealing strategy is in the RL review process and K Basin and CVD construction holds have been released. All variances are off the critical path and recoverable.

MILESTONE EXCEPTION REPORT

Number/ WBS	Level	Milestone Title	Baseline Date	Forecast Completion Date
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OVERDUE - 2

S08-97-006 RL Complete Definitive Design for the Cold Vacuum Drying System 1/12/96 Complete
 1.3.1.1
Cause: Completed on schedule. The central milestone module was not updated in time to reflect completion in the February report.
Impact: None.
Corrective Action: CMM will be updated and on schedule completion will be reflected in the milestone statistics.

S02-01-210 RL Issue DOE Approved K Basin Transition Criteria - EPA 12/30/97 Proposed
 1.3.1.1 Deletion
Cause: Milestone is proposed to be deleted with transfer of PBS TP09 to WM01.
Impact: None.
Corrective Action: A baseline change request to transfer the transition work scope to the SNF project per the DOE Memorandum of Understanding will be developed.

FORECAST LATE - 7

S04-97-355 HQ Complete KW FRS Construction 7/16/98 9/3/98
 1.3.1.1
Cause: Due to concerns regarding technical content and format of Safety Analysis Documents (SAD) it is necessary to revise the content and format of the SAD for FRS, Integrated Water Treatment System (IWTS), and Cask Loadout System (CLS) to comply with RL requirements.
Impact: The time required to prepare the criteria documents and rework/reformat of the existing SAD, which were completed for FRS and IWTS, will delay the Critical Decision 3B authorization, which are required before installation work can proceed in the KW Basin.

MILESTONE EXCEPTION REPORT

Number/ WBS	Level	Milestone Title	Baseline Date	Forecast Completion Date
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Corrective Action: SAD preparation proceeded on an alternative approach consisting of submitting limited safety analysis documents.

S05-98-010	FO	Complete FAB and delivery first shipment of MCOs	5/21/98	7/31/98
1.3.1.1				

Cause: Due to the elimination of the CSB tube inerting features, an engineering change notice (ECN) has been initiated to modify the design of the MCO that will accommodate improved non-destructive examination (NDE) technology for the welded cover cap.

Impact: One month delay in the initiation of Oregon Iron Works (OIW) fabrication activities. Additionally, delays due to ECN approval. An additional two week delay in fabrication startup at OIW is anticipated.

Corrective Action: Supplemental resources for parallel processing and approval of the ECN has been pursued.

S08-98-040	FO	CVD design validation complete	6/15/98	7/01/98
1.3.1.1				

Cause: This milestone is tied to the Grant Contract, which was on hold due to safety significant decision and redesign of the HVAC design.

Impact: This delay caused a negative 13-day float to the fuel removal milestone.

Corrective Action: Replan and deletion of duplication of work in the Grant construction, CVD working and startup detail schedules have been implemented. Successfully brought the CVD project back to zero days total float.

S03-98-611	RL	SAR K Basin submittal	8/4/98	9/17/98
1.3.1.1				

Cause: The delay is caused by extensive comments on the process system.

Impact: Design activities were delayed approximately two months while the architect/engineer performed a

MILESTONE EXCEPTION REPORT

Number/ WBS	Level	Milestone Title	Baseline Date	Forecast Completion Date
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compliance check on existing designs.

Corrective Action: Re-design efforts are being undertaken and delivery dates will be revised.

S05-98-004	RL	MCO available to operations	6/4/98	8/13/98
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1.3.1.1

Cause: Due to the elimination of the CSB tube inerting features, an ECN has been initiated to modify the design of the MCO that will accommodate improved NDE (Non Destructive Examination) techniques for the welded cover cap.

Impact: The delay stems from the time required to revise the MCO design per the ECN.

Corrective Action: None. The revised date is within the project schedule . This change is part of the MCO Sealing Baseline Change Request.

S07-97-054	RL	SAR CSB final submittal	5/29/98	8/14/98
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1.3.1.1

Cause: The project technical baseline was changed from a pressure management basis to a sealed MCO basis with the approval of the urgent BCR.

Impact: The technical inputs to the SAR were delayed, thus moving out the completion of the preparation.

Corrective Action: Approved forecast date per urgent BCR.

S07-97-053	RL	Receive approval of CSB SAR by RL	9/1/98	11/16/98
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1.3.1.1

Cause: The project technical baseline was changed from a pressure management basis to a sealed MCO basis with the approval of the emergency BCR.

Impact: The technical inputs to the SAR were delayed, thus moving out the completion of the preparation.

Corrective Action: Approved forecast date per emergency BCR.